

WHAT IS CLAIMED IS:

1. A data accessing apparatus for writing/reading data to a recording medium in which the data is written per data size that can be increased and decreased stepwise, a data transfer efficiency at writing the data is variable depending on the data size, and a parameter showing the data transfer efficiency at writing the data per the data size is recorded, comprising:

a device for issuing a parameter acquisition command to the recording medium;

a device for selecting an optimum data size at writing the data by collating the parameter transmitted by the recording medium which received the parameter acquisition command with the data transfer efficiency required in the data to be written/read by the data accessing apparatus; and

a device for writing/reading the data with respect to the recording medium based on the selected optimum data size.

2. A recording medium wherein the data is written in/read from per the data size that can be increased and decreased stepwise by the data access apparatus of Claim 1, comprising:

a memory unit in which the parameter is recorded; and

a device for reading the parameter memorized in the memory unit in response to reception of the parameter acquisition command transmitted by the data accessing apparatus and transmitting the read parameter to the data accessing apparatus.

3. The data accessing apparatus of Claim 1, wherein

the parameter is a table in which the data size and an information on a length of time required for writing/reading the data to the recording medium based on the data size are corresponding to each other.

4. The data accessing apparatus of Claim 1, wherein

the recording medium is a semiconductor memory, and the data size is a size corresponding to an integral number

of times of an erasing block size of the recording medium.

5. The data accessing apparatus of Claim 1, wherein  
the recording medium is a recording medium of a card type  
that can be freely attached or removed to the data accessing  
5 apparatus.

6. A data accessing apparatus for writing/reading data to  
a recording medium in which the data is written per data size  
that can be increased and decreased stepwise, a data transfer  
efficiency at writing the data is variable depending on the  
10 data size, and a parameter showing the data transfer efficiency  
at writing the data per the data size is recorded, comprising:

a device to transmitting an information showing the  
necessary data transfer efficiency required in the data to be  
written/read by the data accessing apparatus; and

15 a device to set the data size at writing the data based  
on an information showing an optimum data size transmitted by  
the recording medium which received the information showing  
the required data transfer efficiency so as to write/read the  
data to the recording medium based on the set data size.

20 7. A recording medium wherein the data is written /read per  
the data size that can be increased and decreased stepwise by  
the data access apparatus of Claim 6, comprising:

a memory unit in which the parameter is recorded; and

25 a device for receiving the information to show the data  
transfer efficiency transmitted by the data accessing  
apparatus and selecting the optimum data size at writing the  
data by collating the information showing the required data  
size transfer efficiency with the parameter memorized in the  
memory unit; and

30 a unit to transmit an information on the selected optimum  
data size to the data accessing apparatus

8. The data accessing apparatus of Claim 6, wherein  
the parameter is a table in which the data size and an

information on a length of time required for writing/reading the data to the recording medium based on the data size are corresponded each other.

9. The data accessing apparatus of Claim 6, wherein  
5 the recording medium is a semiconductor memory, and the data size is a size corresponding to an integral times of an erasing block size of the recording medium.

10. The data accessing apparatus of Claim 6, wherein  
10 the recording medium is a recording medium of a card type that can be freely attached or removed to the data accessing apparatus.

11. A data accessing method wherein the data accessing apparatus writes/reads data to a recording medium in which the data is written per data size that can be increased and decreased  
15 stepwise and a data transfer efficiency at writing the data is variable in accordance with the data size, comprising:

a step in which a parameter showing the data transfer efficiency is previously recorded into the recording medium at writing the data into the recording medium per the data size;

20 a step in which the data accessing apparatus transmits a parameter acquisition command to the recording medium at writing/reading the data;

a step in which the recording medium that received the parameter acquisition command transmits the parameter to the  
25 data accessing apparatus;

a step in which the data accessing apparatus that received the parameter collates the parameter with the data transfer efficiency required in the data to be written/read by the data accessing apparatus to thereby set an optimum data size at  
30 writing the data; and

a step in which the data accessing apparatus writes /reads the data between itself and the recording medium based on the set optimum data size.

12. The data accessing method of Claim 11, wherein  
the parameter is a table in which the data size and an  
information on a length of time required for writing/reading  
the data to the recording medium based on the data size are  
5 corresponded each other.

13. The data accessing method of Claim 11, wherein  
the recording medium is a semiconductor memory, and  
the data size is a size corresponding to an integral times  
of an erasing block size of the recording medium.

10 14. The data accessing method of Claim 11, wherein  
the recording medium is a recording medium of a card type  
that can be freely attached or removed to the data accessing  
apparatus.

15 15. A data accessing method wherein the data accessing  
apparatus writes/reads data to a recording medium in which the  
data is written per data size that can be increased and decreased  
stepwise and a data transfer efficiency at writing the data  
is variable in accordance with the data size, comprising:

20 a step in which a parameter showing the data transfer  
efficiency is previously recorded into the recording medium  
at writing the data into the recording medium per the data size;

a step in which the data accessing apparatus transmits  
an information to show the data transfer efficiency required  
in the data to be written/read by the data accessing apparatus  
25 to the recording medium at writing the data;

a step in which the recording medium that received the  
information to show the required data transfer efficiency  
collates the information concerned with the parameter to  
thereby select an optimum data size at writing the data;

30 a step in which the recording medium transmits an  
information to show the selected optimum data size to the data  
accessing apparatus; and

a step in which the data accessing apparatus that received

the information to show the optimum data size sets the data size at writing the data based on the information showing the optimum data size to thereby write/read the data between itself and the recording medium.

5 16. The data accessing method of Claim 15, wherein  
the parameter is a table in which the data size and an information on a length of time required to write/read the data to the recording medium based on the data size are corresponded each other.

10 17. The data accessing method of Claim 15, wherein  
the recording medium is a semiconductor memory, and  
the data size is a size corresponding to an integral times of an erasing block size of the recording medium.

15 18. The data accessing method of Claim 15, wherein  
the recording medium is a recording medium of a card type that can be freely attached or removed to the data accessing apparatus.